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Building & Highway Material Testing Laboratory

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T-2377

Job No.: CTCE/BBMP/BTR/W.No.13/CSR-08/405b/CEMENT/2017-18 Date: 05.08.2017

TEST REPORT ON CEMENT

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
*** Name of Work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
*** Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
*** Sample ID**	:	Cement
Sample Received on	:	03.08.2017
Period of Testing	:	03.08.2017 to 05.08.2017

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4) 1988 (RA-2014)	29.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5) 1988 (RA-2014)	180 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988 (RA-2014)	495 Minutes	Not More than 600 Minutes
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988 (RA-2014)	1 mm	Not more than 10mm

*Information is furnished by the Customer/Representative.

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Job No.: CTCE/BBMP/BTR/W.No.13/BC/Stability/2017-18 23.10.2017

TEST REPORT ON MARSHALL STABILITY OF MIX

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
***Name of the Work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
***Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
*** Source**	:	Hot mix Plant, Bangalore
*** Type of Mix**	:	Bituminous Concrete
Date of Testing	:	23.10.2017

The results of the tests conducted on the Bituminous Concrete mix sample are as follows:

Sl. No	Description	Test Result 1	Test Result 2	Requirement as per MORTH (Table 500-19)
1	Marshall Stability, Kn	9.55	9.70	9 Kn (min)
2	Marshall flow, mm	2.85	3.10	2 – 4
3	Percent air voids in Mineral Aggregate	3.45	4.20	3 – 6
4	Voids in Compacted Mix	13.60	14.30	13 - 15
5	Percent Voids filled with Bitumen	68.50	69.65	65 - 75
6	Density, g/cc	2.27	2.28	--

*Information is furnished by the Customer/Representative.

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Job No.: CTCE/BBMP/BTR/W.No.13/BC/Agg/2017-18 23.10.2017

TEST REPORT ON GRADATION OF AGGREGATE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
* Name of Work	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
* Sample ID	:	Bituminous Concrete
Technical Reference	:	IS : 2386(Part -1)-1963 (RA-2011)
* Type of Mix	:	Hot mix plant, Bangalore
Date of Testing	:	23.10.2017

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Total Weight of Sample: **5250** gm

Sieve Size, mm	Weight Retained, gm	% Retained	Cummulative % Retained	% Passing	JOBMIX Gradation as per MORTH	Remarks
19	0	0	0	100	100	Gradation satisfies Bituminous concrete Grade-II specification as per `MORTH 500-18
13.2	785	14.95	14.95	85.05	79 - 100	
9.5	530	10.10	25.05	74.95	70 - 88	
4.75	610	11.62	36.67	63.33	53 - 71	
2.36	555	10.57	47.24	52.76	42 - 58	
1.18	560	10.67	57.90	42.10	34 - 48	
0.600	515	9.81	67.71	32.29	26 - 38	
0.300	605	11.52	79.24	20.76	18 - 28	
0.150	400	7.62	86.86	13.14	12 - 20	
0.075	415	7.90	94.76	5.24	4 - 10	

Total Weight of Sample: **5300** gm

Sieve Size, mm	Weight Retained, gm	% Retained	Cummulative % Retained	% Passing	JOBMIX Gradation as per MORTH	Remarks
19	0	0	0	100	100	Gradation satisfies Bituminous concrete Grade-II specification as per MORTH 500-18
13.2	645	12.17	12.17	87.83	79 - 100	
9.5	520	9.81	21.98	78.02	70 - 88	
4.75	625	11.79	33.77	66.23	53 - 71	
2.36	650	12.26	46.04	53.96	42 - 58	
1.18	660	12.45	58.49	41.51	34 - 48	
0.600	555	10.47	68.96	31.04	26 - 38	
0.300	560	10.57	79.53	20.47	18 - 28	
0.150	385	7.26	86.79	13.21	12 - 20	
0.075	415	7.83	94.62	5.38	4 - 10	

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Job No: CTCE/BBMP/BTR/W.No.13/BC/Bitumen/2017-18 23.10.2017

TEST REPORT ON BITUMEN CONTENT AFTER GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
* Name of Work	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
* Sample ID	:	Roads in Mathrushree layout, Ward No.13, BBMP, Bangalore.
Technical Reference	:	IS 2386 and IRC:SP:11-1984
Date of Testing	:	23.10.2017

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-18 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
19	0	0	0	100	100
13.2	46.33	9.84	9.84	90.16	79-100
9.5	33.6	7.13	16.97	83.03	70-88
4.75	70.21	14.91	31.88	68.12	53-71
2.36	61.3	13.01	44.89	55.11	42-58
1.18	52.32	11.11	56.00	44.00	34-48
0.6	52.21	11.08	67.08	32.92	26-38
0.3	45.25	9.61	76.69	23.31	18-28
0.15	35.26	7.49	84.18	15.82	12-20
0.075	35.65	7.57	91.75	8.25	4-10

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-18 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
19	0	0	0	100	100
13.2	38.22	8.09	8.09	91.91	79-100
9.5	45.22	9.57	17.66	82.34	70-88
4.75	66.31	14.03	31.69	68.31	53-71
2.36	70.22	14.86	46.55	53.45	42-58
1.18	61.23	12.96	59.51	40.49	34-48
0.6	53.25	11.27	70.78	29.22	26-38
0.3	31.25	6.61	77.40	22.60	18-28
0.15	30.22	6.40	83.79	16.21	12-20
0.075	45.25	9.58	93.37	6.63	4-10

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Job No: CTCE/BBMP/BTR/W.No.13/BC/Bitumen/2017-18

23.10.2017

TEST REPORT ON BITUMEN CONTENT OF BITUMINOUS CONCRETE MIX

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
* Name of Work	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
* Sample ID	:	Roads in Mathrushree layout, Ward No.13, BBMP, Bangalore.
Technical Reference	:	IRC:SP:11-1984
Date of Testing	:	23.10.2017

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BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	471	472.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	29	27.50
7. Bitumen content in %	5.80	5.50
8. Average	**5.65**	

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Job No.: CTCE/BBMP/BTR/W.No.13/BC/Sp_Wa/2017-18 23.10.2017

TEST REEPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
* Name of Work	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
* Sample ID	:	Hot mix plant, Bangalore
Technical Reference	:	IS : 2386(Part -3)-1963 (RA-2011)
* Type of Mix	:	Bituminous Concrete
Date of Testing	:	23.10.2017

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Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2007	2005	2006	
2	Weight of basket suspended in water	W_2 g	755	755	755	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1239	1238	1251	
4	Weight of saturated surface dry aggregate in air	W_3 g	2002	2003	2005	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	763	765	754	
6	Weight of oven dried aggregate	W_4 g	1993	1994	1992	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.612	2.607	2.642	2.620
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.643	2.638	2.688	2.656
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.45%	0.45%	0.65%	0.52%

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Comments:

→ Maximum allowable Aggregate Water absorption value for Bituminous Concrete is 2.0%

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Job No.: CTCE/BBMP/BTR/W.No.13/BC/Stripping/2017-18

23.10.2017

TEST REPORT ON STRIPPING VALUEOF ROAD AGGREGATES (STATIC IMMERSION TEST)

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
*** Name of Work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
*** Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
Technical Reference	:	IS: 6241
*** Type of Mix**	:	Bituminous Concrete
Date of Testing	:	23.10.2017

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Type of binder : 80/100

Percentage of binder used : 5.00% by wt.

Total weight of aggregate : 200 g

Total weight of binder : 10.00 g

Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	2.9	3.07	96.93
2	3.1		
3	3.2		

*Information is furnished 's

Comments:

→ Minimum allowable Aggregate retained coating for Bituminous Concrete is 95%

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Job No.: CTCE/BBMP/BTR/W.No.13/BC/Shape.T/2017-18 21.10.2017

TEST REPORT ON FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
*** Name of Work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
*** Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
*** Sample ID**	:	Hot mix plant, Bangalore
Technical Reference	:	IS : 2386(Part -1)-1963 (RA-2011)
*** Type of Mix**	:	Bituminous Concrete
Date of Testing	:	21.10.2017

Sl.No.	Description	Result
1	Flakiness Index	12.52%
2	Elongation Index	13.92%
3	Combined Flakiness & Elongation Index	26.44%

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Flakiness & Elongation Index for Bituminous Concrete is 30%

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Job No.: CTCE/BBMP/BTR/W.No.13/BC/AIV/2017-18 21.10.2017

TEST REPORT ON IMPACT VALUE OF AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
* Name of Work	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
* Sample ID	:	Hot mix plant, Bangalore.
* Type of Mix	:	Bituminous Concrete
Technical Reference	:	IS: 2386 (Part- 4)-1963 (RA-2011)
Date of Testing	:	21.10.2017

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Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	390	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	80	81	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	309	309	
4	Aggregate Impact value = percent fines 100* (W2/W1) percent	20.57	20.77	**20.67**

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Comments:

→ Maximum allowable Aggregate Impact value for Bituminous Concrete is 24%

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Job No.: CTCE/BBMP/BTR/W.No.13/CSR-08/405b/QB(BC)/2017-18 21.10.2017

TEST REPORT ON DETERMINATION OF BITUMEN CHARACTERISTICS

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
*** Name of work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
*** Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
*** Sample ID**	:	Bitumen
Source/ Location	:	Hot Mix Plant, Bangalore.
Sample Received on	:	19.10.2017
Period of Testing	:	21.10.2017

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The results of the tests conducted on the bitumen sample are as follows:

Sl. No	Description	Test Method as per IS	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	IS :1203 -1978 (RA-2014)	84	80 to 100
2	Softening point, ^{0}C	IS :1205 -1978 (RA-2014)	44	Min. 40
3	Ductility at 27^{0}C, cm	IS :1208 -1978 (RA-2014)	100 >	Min. 75
4	Flash Point, ^{0}C	IS :1209 -1978 (RA-2014)	314	Min. 220

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Technical Manager

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Lab No.: CTCE/BBMP/BTR/W.No.13/WMM/Shape.T/2017-18 04.10.2017

TEST REPORT ON FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

* **Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* **Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
* **Name of Work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
* **Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
* **Sample ID**	:	Wet Mix Macadam
Technical Reference	:	IS 2386(Part 1) 1963 (RA 2011)
Date of Testing	:	04.10.2017

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Sl.No.	Description	Result
1	Flakiness Index	12.35%
2	Elongation Index	13.30%
3	Combined Flakiness & Elongation Index	25.65%

*Information is furnished by the Customer/Representative.

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Comments:

→ Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

Note:

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CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

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JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/BTR/W.No.13/CSR-08/405b/WMM/AIV/2017-18 04.10.2017

TEST REPORT ON IMPACT VALUE OF AGGREGATE

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
*** Name of Work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
*** Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
*** Sample ID**	:	Wet Mix Macadam
Technical Reference	:	IS : 2386(Part -4)-1963 (RA-2011)
Date of Testing	:	04.10.2017

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	392	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	83	84	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	306	308	
4	Aggregate Impact value = percent fines 100* (W2/W1)%	21.34	21.43	**21.38**

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Aggregate Impact value for Wet Mix Macadam is 30%

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JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/BTR/W.No.13/WMM/Gradation/2017-18

04.10.2017

TEST REPORT ON GRADATION OF WET MIX MACADAM

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
* Name of Work	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
Sample ID	:	Wet Mix Macadam
Technical Reference	:	IS 2386 (part-1)1963 (RA-2011)
Date of Testing	:	04.10.2017

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Oven Dry Wt (gm): **5000**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits As per Morth Table 400-13
53	0	0	0	100	100
45	15	15	0.3	99.7	95-100
22.4	1560	1575	31.50	68.50	60-80
11.2	1130	2705	54.10	45.90	40-60
4.75	630	3335	66.70	33.30	25-40
2.36	510	3845	76.90	23.10	15-30
0.600	470	4315	86.30	13.70	8-22
0.075	425	4740	94.80	5.20	0-8

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T-2377

Job No.: CTCE/BBMP/BTR/W.No.13/CSR-08/405b/Cube/2017-18 27.09.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
*** Name of the work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
*** Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
*** Sample ID**	:	Drain Covering Slab Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
*** Grade of Concrete**	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	27.09.2017

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Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	30.08.2017	27.09.2017	8.105	476.6	21.18
2	30.08.2017	27.09.2017	8.265	493.8	21.95
3	30.08.2017	27.09.2017	8.392	516.8	22.97

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Job No.: CTCE/BBMP/BTR/W.No.13/CSR-08/405b/Cube/2017-18 27.09.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
*** Name of the work**	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
*** Reference**	:	EE/DD/WO/125/2016-17 Dated: 21.02.2017
*** Sample ID**	:	Drain Covering Slab Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
*** Grade of Concrete**	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	27.09.2017

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	30.08.2017	27.09.2017	8.112	474.5	21.09
2	30.08.2017	27.09.2017	8.280	515.2	22.90
3	30.08.2017	27.09.2017	8.326	529.8	23.55

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Job No.: CTCE/BBMP/BTR/W.No.13/CSR-08/405b/Cube/2017-18 25.09.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. B.T. Ravikumar,** #129, 3rd Main Road, HVR Layout, Magadi Main Road, Bangalore – 560 079.
* Name of the work	:	Improvements & Asphalting to Main & Cross roads in Mathrushree Layout & other roads in Ward No.13, in Shettyhalli Sub Division, BBMP, Bangalore.
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Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	25.09.2017

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Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	28.08.2017	25.09.2017	8.259	478.3	21.26
2	28.08.2017	25.09.2017	8.396	496.5	22.07
3	28.08.2017	25.09.2017	8.486	508.2	22.59

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